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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

NPDES PERMIT NO: **RI 0023221**

PUBLIC NOTICE DATE:

NAME AND ADDRESS OF APPLICANT:

**Cumberland Engineering
d/b/a ACS Auxiliaries Group
108 Roddy Avenue
South Attleboro, MA 02703**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**Cumberland Engineering
d/b/a ACS Auxiliaries Group
108 Roddy Avenue
South Attleboro, MA 02703**

RECEIVING WATERS: **Blackstone River (RI0001003)**

CLASSIFICATION: **B1{a}**

I. PROPOSED ACTION

The above named applicant has applied to the U.S. Environmental Protection Agency for the re-issuance of its National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water. The current permit was issued September 30, 1996 and became effective 30 days from the date of signature. It expired on October 30, 2001. A timely re-application was received. This draft permit, after it becomes effective, will expire five years from the effective date of issuance.

II. TYPE OF FACILITY AND DISCHARGE LOCATION

The facility is engaged in the treatment of steel to be used in the manufacturing of size reduction equipment for the plastics industry. The facility discharges into the Blackstone River just south of the Massachusetts/Rhode Island border, in Rhode Island (See Figures 1 & 2).

The facility's discharge outfall is listed below:

<u>Outfall</u>	<u>Description of Discharge</u>	<u>Outfall Location</u>
001	Non-contact cooling water and storm water	Blackstone River

III. DESCRIPTION OF DISCHARGE

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A quantitative description of the discharge in terms of significant effluent parameters based on recent discharge monitoring reports (DMRs), January 1999 through October 2001, is shown on Table 1 of this fact sheet.

IV. LIMITATIONS AND CONDITIONS

The effluent limitations and monitoring requirements may be found in the draft NPDES permit.

V. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMITATION DERIVATION

A. PROCESS DESCRIPTION

Cumberland Engineering, doing business as, ACS Auxiliaries Group, is located in South Attleboro, Massachusetts but the discharge from the facility is located just over the state border in Rhode Island. The State of Rhode Island has been delegated NPDES permit issuance authority for discharges of wastewater to Rhode Island waters. However, because of potential complications that may arise where the facility is located in one state but discharges to another, EPA and the Rhode Island Department of Environmental Management have agreed that EPA will issue this permit as a federal NPDES permit and will ensure the permit satisfies Rhode Island's Water Quality Regulations.

ACS's South Attleboro plant is engaged in processing of steel to manufacture plastics and glass recycling machinery. Processes including milling, drilling, cutting, welding and heat treating. The facility discharges storm water runoff and approximately 65,000 gpd of non-contact cooling water to a common storm sewer line running through the property, which discharges to the Blackstone River. The source of ACS's non-contact cooling water is the municipal water supply. The cooling water is piped through heat exchangers, compressors and welding units, and never comes in contact with raw materials (See Figures 3 A & B).

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Overview of Federal and State Regulations

The Clean Water Act (CWA) requires that discharges satisfy both minimum technology and water quality requirements. The minimum technology requirements which are presently applicable are the Best Practical Control Technology currently available (BPT) Section 301 (b)(2)A of the Clean Water Act, Best Conventional Pollutant Control Technology (BCT) Section 301 (b)(2)E and Best Available Technology Economically Achievable (BAT) Section 301 (b)(2)A. No national effluent guidelines have been established for storm water runoff or non-contact cooling water from a facility in the industrial category. Therefore, the technology based effluent limitations have been developed on a case by case basis using Best Professional Judgement as provided in Section 402(a)(1) of the CWA.

Section 402 (p)(2)(B) of the CWA requires storm water discharges associated with an industrial activity to obtain an NPDES permit. The standard industrial classification (SIC) code for ACS is 3559 (manufacturer of industrial and commercial machinery). This SIC code is defined under category XI of the national storm water regulations found at 40 CFR §122.26(b)(14)(XI) as an industrial activity. Facilities which fall under category XI are subject to an NPDES permit for storm water if there is exposure of material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery to storm water.

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2. Water Quality Standards; Designated Use; Outfall 001

The Blackstone River, from the CSO at River and Samoset Streets to the Slater Mill Dam is classified as a Class B1{a} water in the Rhode Island Water Quality Regulations, Appendix A-Water Quality Classification Descriptions. RI Water Quality Regulations, Rule 8.B.(c) designates class B1{a} waters for primary and secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class B criteria must be met. The symbol {a} located next to the classification indicates a partial use designation due to impacts from CSOs.

Available Dilution

Water quality based limitations are established with the use of a calculated available dilution. The 7Q10 is the lowest observed mean river flow for 7 consecutive days, recorded over a 10-year recurrence interval. Additionally, the facility design flow is used to calculate available effluent dilution.

The Blackstone River at Woonsocket, RI (USGS 01112500) has a 7Q10 flow of 101 cfs (65.8 mgd). The permitted flow for ACS is 65,000 gpd. The dilution is greater than 1000:1.

OUTFALL 001 - CONVENTIONAL POLLUTANTS

The permit authorizes the discharges of storm water and non-contact cooling water, however, the monitoring requirements are limitations in the table are dry weather monitoring and therefore only pertain to the non-contact cooling water. Requirements for storm water are found in Part I.B. of the draft permit and consists of a storm water pollution prevention plan.

pH - The draft permit includes pH limitations which are required by state water quality standards. Class B1 waters shall be in a range of 6.5 through 9.0 standard units or as naturally occurs (RI WQR Table 1.8.D(2)).

Temperature - The draft permit includes temperature limitation which is required by state water quality standards. Temperature increases shall not raise the temperature of the receiving waters above the recommended limit on the most sensitive receiving water use nor cause the growth of undesirable or nuisance species of biota and in no cases exceed 83 degrees Fahrenheit. In no case shall the temperature of the receiving water be raised more than 4 degrees Fahrenheit (RI WQR Table 1.8.D(2)).

The average effluent temperature from the ACS facility is 53° F. During the summer months, the discharge is below the average instream temperature of Blackstone River, 70° F. However, during the winter months the discharge temperature is above the average instream temperature of the Blackstone River, 40° F. The average winter flow of the Blackstone River at Woonsocket, RI is 912 cfs (588 mgd). As the permitted flow of ACS is 65,000 gpd, the dilution factor is greater than 9000. Therefore, there is no reasonable potential for the discharge to increase the temperature of the receiving water more than 4 degrees.

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Oil and Grease - The draft permit includes a limit of 10 mg/l for oil and grease which has been carried forward from the previous permit.

OUTFALL 001 - WHOLE EFFLUENT TOXICITY TESTING

The previous permit required one modified acute and chronic Whole Effluent Toxicity (WET) test based on the potential for non-contact cooling water effluents to be toxic. The results were as follows:

Species	LC50	C- NOEC	LOEC
Ceriodaphnia	>100 %	100%	>100 %
Fathead Minnow	>100 %	100%	>100 %

Based on these results and EPA Region 1 Whole Effluent Toxicity Testing Strategy for High Dilution NPDES permits, EPA has determined that additional WET tests are not required in this permit.

STORM WATER POLLUTION PREVENTION PLAN

Pursuant to Section 304 (e) of the CWA and 40 CFR §125.103(b), Best Management Practices (BMPs) may be expressly incorporated into a permit on a case by case basis where necessary to carry out Section 402(a)(1) of the CWA. The ACS facility engages in activities which could result in the storm water discharge of pollutants to waters of the United States. These operations include at least one of the following from which there is or could be site runoff: material storage, in-facility transfer, material processing, material handling, or loading and unloading. The permit requires this facility to develop a Storm Water Pollution Prevention Plan (SWPPP) which will include BMPs appropriate for this specific facility to control storm water discharges from these and other activities which could contribute pollutants to waters of the United States through storm water.

ACS is required to develop the SWPPP by 90 days after the effective date of the permit. The goal of the SWPPP is to eliminate or reduce the potential for discharge of pollutants through the storm water system. In the event the potential cannot be eliminated, the permittee should select BMPs to reduce or eliminate the pollutant loading to the receiving water. The SWPPP requirements direct the Permittee to review the physical equipment, the operation procedures, and the operator training at the facility. The objective of this review is to protect waters of the United States by eliminating or minimizing the potential discharge of any pollutants.

The SWPPP becomes an enforceable element of the permit upon the effective date of the permit. Consequently, the SWPPP is as enforceable as any effluent limits on the discharges.

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VI. ANTI-BACKSLIDING

Anti-backsliding as defined in Section 402(o) of the Clean Water Act and at 40 CFR §122.44(l)(1) requires reissued permits to contain limitations as stringent or more stringent than those of the previous permit unless the circumstances allow application of one of the defined exceptions to this regulation. For example, anti-backsliding does not apply when changes to limits are based on new information not available at the time of the previous permit reissuance (40 CFR §122.44 (l)(2)(i)(B)(1)) or when limits are changed as a result of material and substantial additions or alterations to the permitted facility which occurred after permit issuance which justify the application of less stringent limitations, as defined 40 CFR § 122.44 (l)(2)(i)(A).

VII. ANTI-DEGRADATION

The Rhode Island Anti-degradation Policy is found at RI Water Quality Regulations, Rule 18. All existing uses of the Blackstone River must be protected. This draft permit is being reissued with allowable discharge limits as stringent as the current permit with the same parameter coverage and no change in outfall location. The public is invited to participate in the anti-degradation finding through the permit public notice procedure.

VIII. MONITORING AND REPORTING

The permittee is obliged to monitor and report sampling results to EPA and the RI DEM within the time specified in the permit. The effluent monitoring requirements have been established to yield data representative of the discharge by the authority under Section 308(a) of the CWA in accordance with 40 CFR 122.441(j), 122.44, and 122.48.

The remaining general conditions of the permit are based primarily on the NPDES regulations 40 CFR 122 through 125 and consist primarily of management requirements common to all permits.

IX. STATE CERTIFICATION REQUIREMENTS

EPA may not issue a permit unless the State Water Pollution Control Agency with jurisdiction over the receiving waters certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Surface Water Quality Standards. The staff of the Rhode Island Department of Environmental Management is reviewing the draft permit and will determine if the limitations are adequate to protect water quality. EPA has requested permit certification by the state pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

X. PUBLIC COMMENT PERIOD AND PROCEDURES FOR FINAL DECISION

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Office of Ecosystem Protection, MA Unit, One Congress Street, Suite-1100, Boston, Massachusetts 02114. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing.

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Public hearings may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates a significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period and after a public hearing, if such a hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

XI. EPA CONTACT

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

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Dated Linda M. Murphy, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency

Attachments: Figures 1-3B not available electronically
Table 1 - See separate file